

### Abstract

There are included a transmission modulator (103) for impulse-modulating the data to be transmitted, thereby producing a subcarrier; a subcarrier control section for controlling the subcarrier to be utilized for communication, depending on the amount and significance of information and on the propagation condition of communication; and an antenna section (101) for radiating the subcarrier signal. This structure allows selection of a subcarrier suitable for information to be transmitted and for propagation environment, and hence allows a communication to be performed which exhibits a high flexibility and a high noise immunity. Thus, there can be provided a communication apparatus that can perform a high-quality, high-stability communication exhibiting an improved interfering immunity and that performs a flexible impulse communication.